



Parts Catalogue 2012

Solar (PV) Panels

Mounts

Inverters

Power Panels

Battery Monitors

Charge
Controllers

Meters

Batteries

Globe Solar

And more.....

Switch Energy Inc.

Celebrating over
18 years of providing
alternative power
solutions.



Authorized Switch Energy Dealer:

FLEINCO
**ALTERNATIVE ENERGY
& CONSTRUCTION**

Phone 250•876•8786 info@fleinco.com

www.fleinco.com

Serving Northern British Columbia

We have 1000's of products from many manufacturers available to us. If you require parts for an existing system or wish to upgrade, please contact us at www.switchenergy.ca for a dealer near you.

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Prices and products in this catalogue are subject to change without notice.

All prices are in Canadian funds and are FOB Kelowna, BC Canada

All prices subject to applicable taxes.

We follow a strict code of conduct protecting your right to privacy.

SOLAR PANELS (PV)

Panels that turn sunlight into electricity are called photo voltaic modules or PV modules for short. Investing in PV allows you to produce your own electricity without noise, air pollution, and with no moving parts while using a clean, renewable resource. Most have manufacturer warranties of 20 years, and useful life spans that will probably exceed 60 years. A PV system will never run out of fuel and has been called “the ultimate energy source for the 21st century.”



Solar Panels	
Kyocera	
KD135 watt	\$ 404.93
KD245 watt	\$ 528.03
Conergy P	
CP235PA	\$ 479.59
ST	
ST20 watt	\$ 146.16
ST30 watt	\$ 196.40
ST50 watt	\$ 229.90
ST85 watt	\$ 382.15



SOLAR PANEL MOUNTS



Switch Energy mounts - manufactured in Kelowna, BC. They are all aluminum construction with stainless steel hardware. Mounts are available for most brands of panels. There are also other types of mounts - for the roof, side of pole, etc available. With the mounts below, the size of pole required is listed but it is not included.



Mounts - Top of Pole

1 x 100 to 140 watt	2.5" pole	\$ 199.80
2 x 100 to 140 watt	2.5" pole	\$ 238.34
3 x 100 to 140 watt	4" pole	\$ 343.73
4 x 100 to 140 watt	4" pole	\$ 455.53
6 x 100 to 140 watt	4" pole	\$ 848.00
8 x 100 to 140 watt	6" pole	\$ 1235.46
10 x 100 to 140 watt	6" pole	\$ 1322.04
1 x 175 to 245 watt	2.5" pole	\$ 220.66
2 x 175 to 245 watt	4" pole	\$ 307.61
3 x 175 to 245 watt	4" pole	\$ 448.52
4 x 175 to 245 watt	4" pole	\$ 651.73
6 x 175 to 245 watt	6" pole	\$ 1227.04
8 x 175 to 245 watt	6" pole	\$ 1427.91

INVERTERS

An inverter is an electronic device that converts DC electricity, which is stored in your batteries, into AC electricity which you use to run typical household appliances such as microwaves, TV's, computers, lights, etc.

There are two types of inverters: the modified sine wave and the pure sine wave.

Due to technological advances made in the electronics industry over the past few years, some appliances such as microwave ovens and TV's can be very sensitive to the modified sine wave and will not run. You may also notice a buzzing or humming sound coming from the modified sine wave inverter when it is under load. This does not occur with the pure sine wave inverters.

A pure sine wave inverter provides power that is exactly like the power produced by the utility company and therefore capable of running all electronics.

All inverters listed are Pure Sine Wave. Modified Sine Wave inverters are available by special order.



Sheet Metal Power Panel Pieces
Available..... Contact us for
pricing.



Magnum Inverters

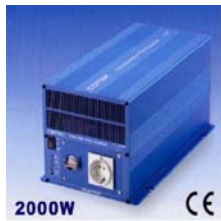
MMS1012	\$ 959.20
MMS1012-G with cord & GFIC plug	\$ 1039.20
MS2012	\$ 1719.20
MS2812	\$ 1983.20
MS4024	\$ 2079.20
MS4024PAE 120/240V	\$ 2159.20
MS4448PAE120/240V	\$ 2159.20

Accessories

ME-RC50 Remote Control	\$ 183.20
ME-ARC50 Adv Remote Control for use with the PAE series	\$ 239.20
ME-BMK Battery Monitor Kit	\$ 175.20
ME-AGS-N Auto Gen Start	\$ 263.20
ME-BTS-15 Temp Sensor	\$ 40.00
MagWeb Wireless Monitoring Kit	\$ 423.20
MagWeb Ethernet Monitoring Kit	\$ 319.20

NEW!

INVERTERS



Cotek

SK1500 watt	\$ 778.61
SK2000 watt	\$ 932.89
ST2000 watt with transfer relay	\$ 1170.91

Accessories

CR8 remote for SK/ST series	\$ 41.01
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Sunny Island

SI5000 48V battery based 5000 watt inverter	\$ 5721.70
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MorningStar



Sure Sine 300 watt	\$ 321.25
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Xantrex

XW4024 4.0 kW	\$ 3470.87
XW4548 4.5 kW	\$ 3618.10
XW6048 6.0 kW	\$ 4085.96

Accessories

XW Distribution Panel	\$ 1318.05
XW System Control Panel	\$ 263.61
XW Conduit Box	\$ 234.32
XW Auto Gen Start	\$ 181.60
XW60 MPPT Controller	\$ 601.91
XW80-600V MPPT Controller	\$ 1405.92
Xantrex Temp Sensor	\$ 37.05
Xantrex 60 amp Breaker	\$ 31.97



GRID TIE INVERTERS

SMA Grid Tie inverters come with a DC disconnect.



SB-7000 watt inverter

Data Logger



SMA Grid Tie Inverters

SB-3000-US 3000 watt	\$ 2398.30
SB-4000-US 4000 watt	\$ 2952.20
SB-5000-US 5000 watt	\$ 3751.15
SB-6000-US 6000 watt	\$ 4041.15
SB-7000-US 7000 watt	\$ 4396.40
SB-8000-US 8000 watt	\$ 4779.20

Accessories

SMA web enabled Data Logger	\$ 750.59
RS485 Module for use in SMA inverters	\$ 121.80
15 meters Cable for RS485 module	\$ 85.26

Enphase Grid Tie Inverters

Single 240V unit	\$ 249.69
Single 208V unit	\$ 249.69
240 VAC install kit	\$ 74.60
208 VAC install kit	\$ 74.60
Enphase Envoy EMU Communication to Enlighten	\$ 691.22
Enphase Enlighten - 5 year license (one per inverter)	Free

When using Enphase Grid Tie inverters, you need one inverter for each solar panel. If an inverter fails, you only lose energy production from that one solar panel - not from the whole solar array.



POWER PANELS

Magnum Energy Power Panels

**Products are Evaluated Under the
CSA Special Inspection Program**

ALL POWER PANELS INCLUDE:

- Magnum Inverter/Charger
- Magnum Mini Panel with AC/DC breakers
- MPPT Charger Controller
- Battery Monitoring Kit
- Remote Control or Advanced Remote Control
- Battery to Inverter Cables housed in Flexible Conduit
- Mounting Back Plate
- Easy Connection Points for Solar and AC Wiring
- CSA Evaluated as a Unit
- Built and Fully Tested

**Pre-assembled. Pre-wired. Fully-tested.
Ready to be installed Power Panels.**



The Magnum Energy Power Panels are CSA evaluated as a complete unit. They are quick and easy to install, and are electrical inspector friendly. All products used in the Power Panels carry their manufacturers warranties.

See following page for available sizes and configurations.

MAGNUM POWER PANELS

For Solar Installations	
Magnum MS2012 inverter with TriStar TS45 charge controller 120VAC	\$ 3766.44
Magnum MS2812 inverter with TriStar TS60 charge controller 120VAC	\$ 4158.33
Magnum MS4024 inverter with TriStar TS60 charge controller 120VAC	\$ 4307.62
Magnum MS4024PAE inverter with MidNite Classic 200 charge controller 120/240VAC	\$ 4649.56
Dual Magnum MS4024PAE inverters with MidNite Classic 200 charge controller 120/240VAC	\$ 8101.14
Magnum MS4448PAE inverter with MidNite Classic 200 charge controller 120/240VAC	\$ 4649.56
Dual Magnum MS4448PAE inverters with MidNite Classic 200 charge controller 120/240VAC	\$ 8003.70
Magnum Expandable MS4448PAE Power Panel - one inverter on double back plate with MidNite Classic 200 charge controller 120/240VAC	\$ 5163.44
Magnum Expansion Kit for above MS4448PAE Power Panel	\$2953.46



Dual Power Panel



MAGNUM POWER PANELS

For Micro Hydro Installations	
Magnum MS2012 inverter with TriStar TS60 charge controller 120VAC	\$ 3496.96
Magnum MS2812 inverter with TriStar TS60 charge controller 120VAC	\$ 3760.96
Magnum MS4024 inverter with TriStar TS60 charge controller 120VAC	\$ 3856.96
Magnum MS4024PAE inverter with TriStar TS60 charge controller 120/240VAC	\$ 3955.46
Magnum MS4448PAE inverter with TriStar TS60 charge controller 120/240VAC	\$ 3955.46

CONVERTER/CHARGERS

Using **state-of-the-art, switch-mode technology**, IOTA Power Converter/Battery Chargers are engineered with the user and variable environmental conditions in mind. Extra care has been given to insure many years of service-free operation, even when subjected to extremely harsh conditions. Batteries are charged quickly and efficiently without over-charging and pumps, motors, and fans operate perfectly for prolonged life.



Converter/Chargers	
Iota	
DLS30	\$ 161.68
DLS45	\$ 168.42
DLS55	\$ 185.26
DLS75	\$ 318.31
Smart IQ Charger Module	\$ 33.68

ELECTRICAL



Miscellaneous

Mini DC Breaker Box 175/250 amp	\$ 210.48
MNPV 3 Combiner Box	\$ 80.75
MNPV 6 Combiner Box	\$ 98.89
6-250 Combiner Box High Voltage Unit	\$ 111.62
12-250 Combiner Box High Voltage Unit	\$ 177.28
Lightning Protector for DC	\$ 41.11
Din Rail DC Breakers 150V	\$ 18.27
Din Rail DC Breakers 300V	\$ 32.29

Meters & Shunts

Trimetric 2020 12/24V	\$ 185.26
Trimetric 2020 with shunt	\$ 218.94
Trimetric 2020 48V adaptor	\$ 33.68
Trimetric 2025 12/24/48V	\$ 195.36
Trimetric 2025 with shunt	\$ 227.36
Pentametric	\$ 245.89
Pentametric Display	\$ 225.68
Ethernet/LAN interface	\$ 190.31
Temperature Probe	\$ 33.68
Pentametric relay - for gen start, with "max run time" timer	\$ 109.47
Battery Desulphator BD-2	\$ 133.40
Kill A Watt Meter EZ	\$ 43.79
Efergy Meter - whole house monitoring	\$ 148.80



CHARGE CONTROLLERS

Charge controllers basically protect the batteries from being overcharged by the solar panels.

MPPT (Maximum Power Point Tracking) charge controllers increase charge current by harnessing more PV (photovoltaic) power.



TriStar



Charge Controllers

TriStar

TS45	\$ 178.13
TS45MPPT includes RTS temp probe	\$ 505.47
TS60	\$ 235.99
TS60MPPT includes RTS temp probe	\$ 633.36
TS-M-2 MPPT display cover	\$ 100.49
TS-RTS Temp probe	\$ 35.02
TS-RM-2 Remote Display for all TriStars	\$ 141.59

MorningStar

Regulator SS-10-12V	\$ 53.29
Regulator SS-10L-12V	\$ 66.99
Regulator SS-20L-12V	\$ 88.31
Regulator SS-06-12V	\$ 45.68
Sunsaver Duo with remote display	\$ 175.09
Lighting controller SL-10L-12 V	\$132.46
Lighting controller SL-20L-12 V	\$ 170.52

CHARGE CONTROLLERS

Charge controllers basically protect the batteries from being overcharged by the solar panels.

MPPT (Maximum Power Point Tracking) charge controllers increase charge current by harnessing more PV (photovoltaic) power.



Charge Controllers

MidNite Solar

Classic 150MPPT	\$ 796.69
Classic 200MPPT	\$ 843.55
Classic 250MPPT	\$ 890.42

OutBack

FM60 MPPT	\$ 781.04
FM80 MPPT	\$ 875.44

Xantrex

XW60 MPPT	\$601.91
XW80-600V MPPT	\$1405.92

Blue Sky Energy

SB3024iL 12/24V 30A CSA	\$ 403.19
SB2512iX 12V only 25A	\$ 270.65
IPN Pro Remote Display with 500 amp shunt	\$ 243.87
BSE Temp Sensor	\$ 33.68
IPN Pro Remote Display without shunt	\$ 198.56



BATTERIES

Absorbed Glass Mat Batteries are maintenance-free and non-spillable.
Faster and more efficient recharging than standard flooded technology.



AGM Sealed Batteries

PowerSonic 12V 100 Ah	\$ 238.35
Discover L16 6V 390 Ah	\$ 606.39
Discover EV185 12V 234 Ah	\$ 710.36

FRIDGES & FREEZERS

Super efficient, ultra insulated DC fridges and freezers.

Nova Kool

R5810 DC 5.8 cu ft fridge	\$1445.00
RFS7501 DC 7.5 cu ft fridge 2 cu ft freezer	\$ 1965.00
Nova Kooler BCD30 liter	\$ 791.00
Nova Kooler BCD45 liter	\$ 860.00
Nova Kooler BCD60 liter	\$ 969.00

Accessories

AC Adaptor for BCD Koolers	\$ 86.00
Insulated cover for Kooler - specify Kooler size	\$ 40.00



R5810



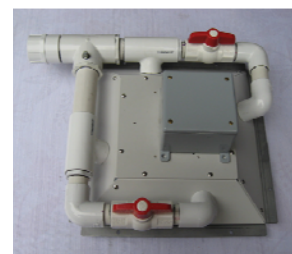
RFS7501



WATER & WIND POWER

Water Turbines

Up to 1100 watts 12/24/48 V	2 nozzles	\$ 1960.38
Up to 1100 watts 12/24/48 V	4 nozzles	\$ 2273.64
Up to 1800 watts 12/24/48 V	4 nozzles	\$ 2463.29
Spring Box		\$ 94.25
Manifold		\$ 217.50
NH400 12 V turbine		\$ 1909.22
NH600 24/48 V turbine		\$ 1909.22
Diversion Load Controller		\$ na



Wind Turbines

Many models available - ranging in size from 200 watts to 50 kW. Off Grid or Grid Tie units. Call for models and pricing.



Wind testing with evaluation report available upon request.

WATER PUMPS

Water Pumps

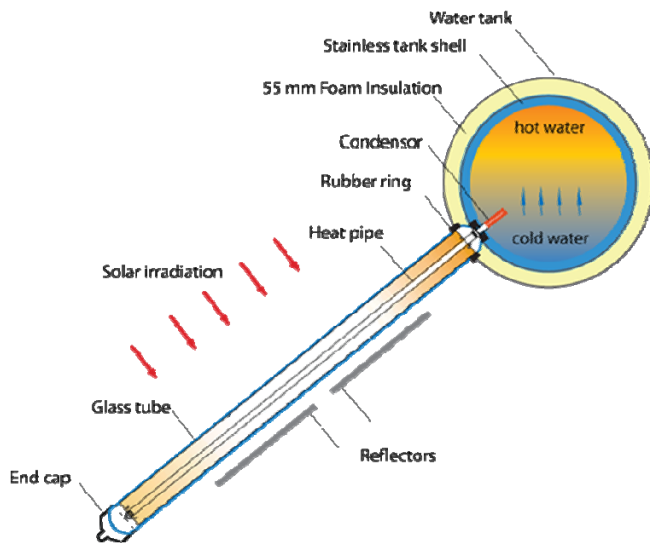
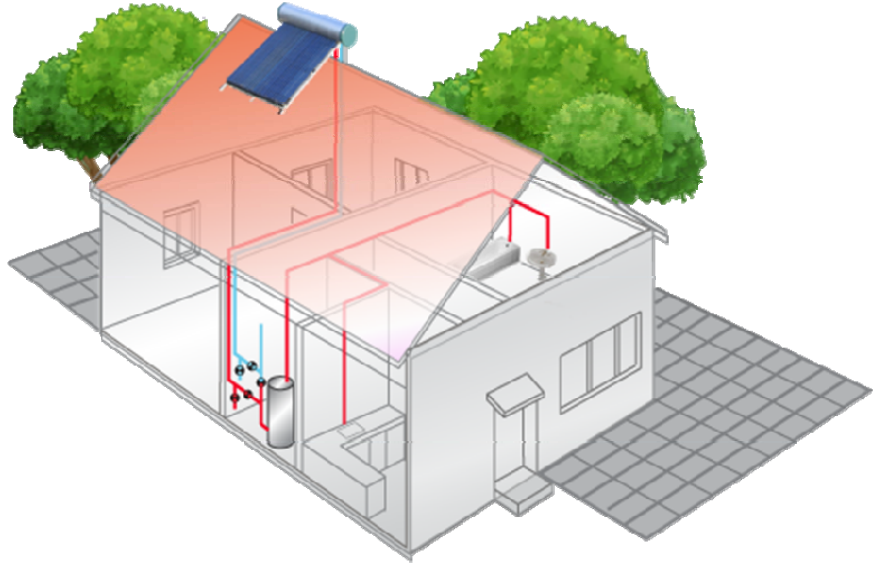
Grundfos SQ Flex Pump - 3, 6, 11, 16, 25, 40 or 60 avail	\$ 2089.00
SQ Flex Water Level Switch	\$ 33.50
SQ Flex Controller CU 200	\$ 467.41



SOLAR WATER HEATING SYSTEM

Features:

- High Performance
- High Reliability
- No Glycol, No Chemicals
- No Maintenance
- CSA Certified



Globe Solar

GSE IP-195

\$3500.00

The Globe Solar should be installed by a licensed plumber.

Solar water heating never conflicts with the existing hot water tank. The Solar heater is connected upstream of the existing tank as a pre-heater.

How It Works

Solar collector evacuated tubes collect and convert sunshine energy into thermal energy. With the cutting-edge vacuum-tube collecting technology, over 92% of sunshine energy is converted to thermal energy for heating. A copper heat pipe which has purified water in it, is installed in each evacuated tube. The sun heats the water in the copper tubes. This heat is then transferred to the water in the tank which in turn feeds directly into your hot water tank.

Go to the Globe Solar website for more information & real time data on actual systems.

www.globesolarenergy.com



GENERATORS

LIFE...UNINTERRUPTED™



Standby Generators

Available in sizes from 8 kW
to 20 kW Propane only

Contact us
for pricing

Off Grid Generators

Generac EcoGen 6kW \$ 4978.00

Start Battery Included. Available in 120V and 120/240V.
All units are inspected & load tested.



EcoGen Series

Includes:

- Electronic Governor
- External Main Circuit Breaker
- Flexible Fuel Line Connector
- Composite Mounting Pad
- LP Gas Operation Only
- cUL Listed

www.switchenergy.ca